

IN THE DRAWINGS

Replacement drawing sheets illustrating amended FIGs. 2 and 3 are attached.

FIG.2 has been amended to change "<" to ">" and to insert a space between "IN" and "CELLS" in box 214.

FIG. 3 has been amended to change "BEGIN" to "END" in oval 320.

REMARKS

Examiner comments with respect to the drawings and the specification have been addressed with the amendments to the drawings and specification described above.

Claims 1, 2, 6, 8, 10, 11, 24, 26 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Murto (U.S. Patent Number 5,966,662), claims 3, 4, 7, 25 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Murto in view of Hult et al. (U.S. Patent Number 5,822,700, hereinafter “Hult”), claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Murto in view of Mangal et al. (U.S. Patent Application Publication Number 2003/0148785, hereinafter “Mangal”), and claims 12-15 and 29-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hult in view of Murto. Respectfully disagreeing with these rejections, reconsideration is requested by the applicants. Nonetheless, the applicants have amended independent claims 1 and 24 in accordance with the Examiner’s indication of the allowability of original claim 5.

Independent claim 12 recites “transmitting the short messaging to the MS only in those cells of the plurality of cells in which the **paging channel loading level** is below a short messaging threshold.” Independent claim 29 recites “adapted to transmit the short messaging to the MS via the wireless transceiver equipment for only those cells of the plurality of cells in which the **paging channel loading level** is below a short messaging threshold.” The Examiner indicates that Hult does not teach these portions of claims 12 and 29 but that Murto does. In particular, the Examiner asserts that “Murto discloses a method for signaling based on paging channel loading...” citing the Murto abstract and Murto column 1, lines 26-29. The Murto abstract reads as follows (emphasis added):

A mobile communication system and a method controls subscriber paging messages in a mobile communication system. The base stations of a mobile communication system are arranged according to their **traffic load** into paging groups with different priorities, so that base stations with a **traffic load** level lower than a predetermined threshold value

have a higher priority in the selection of base stations for transmitting a paging message than base stations with a **traffic load** level higher than the threshold value. A paging message for a mobile station is first transmitted via the lightly loaded base stations of the location area of the mobile station.

Thus, the applicants point out that Murto appears to be focused on the traffic channel loading level rather than the paging channel loading level, as recited by the claims. Murto column 1, lines 18-49 reads as follows (emphasis added):

The geographical area covered by a mobile communication system is divided into small radio cells in order to improve the utilization of frequencies. While in a cell, a mobile station communicates with the fixed network via the base station of the cell. Mobile stations can move freely from one cell to another within the system. An example of such a system is the digital mobile telephone system GSM. A mobile station is informed of incoming calls by transmitting via the cell base station a paging message to which the mobile station should respond. **Since it is not reasonable to transmit the paging message via all the base stations of the entire system, the fixed network should know the location of the mobile station within a relatively small area.** The fixed network typically knows the location of a mobile station within a larger area, generally called a location area, consisting of one or several cells. When the mobile station moves to a new location area, it is registered as a visiting subscriber in the subscriber database of the location area, i.e. in a visitor location register, and registration is simultaneously cancelled in the visitor location register of the previous location area. Furthermore, a mobile communication network usually comprises at least one centralized subscriber database, i.e. a home location register, which stores subscriber data permanently. When a new mobile station is registered in a visitor location register, the subscriber data concerning the subscriber of this mobile station is requested from the home location register, and the subscriber location data in the home location register is simultaneously updated, this data being maintained with an accuracy of a visitor location register. A visitor location register is usually integrated with a mobile services switching centre and it controls several location areas.

Moreover, while Murto does teach that it is not reasonable to transmit a paging message via all the base stations of the entire system, Murto merely suggests that the fixed network should therefore know the location of the mobile station within a relatively small area. The applicants fail to see how, on this basis, Murto can be said to teach or suggest transmitting the short messaging to the MS only in those cells of the plurality of cells in which the paging channel loading level is below a short messaging threshold.

Since none of the references cited, either independently or in combination, teach all of the limitations of independent claims 1, 12, 24 or 29, or therefore, all the limitations

of their respective dependent claims, it is asserted that neither anticipation nor a prima facie case for obviousness has been shown. No remaining grounds for rejection or objection being given, the claims in their present form are asserted to be patentable over the prior art of record and in condition for allowance. Therefore, allowance and issuance of this case is earnestly solicited.

The Examiner is invited to contact the undersigned, if such communication would advance the prosecution of the present application. Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. **502117 -- Motorola, Inc.**

Respectfully submitted,
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